

ANIMAL VULNERABILITY AND THE NECESSITY OF PROTECTING THEM

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ABSTRACT

In Romania, there are at least 14 animal species represented by 123 animal breeds and pure lines listed on the List of animal genetic resources in critical state, threatened, or vulnerable. Though these animal species need to be protected, their conservation has not been supported financially. These categories of vulnerable animals are represented by: 13 sheep breeds, 19 fish species and breeds, 2 goat breeds, 2 swine breeds, 4 goose breeds, 61 chicken breeds and pure lines, 7 turkey populations, 7 duck breeds, the Romanian buffalo, and a bovine breed, the *Sură de stepă*.

Keywords: animal protection, vulnerability, animal species

INTRODUCTION

Animal breeding plays an important role in the world's economic life since it supplies foods indispensable to human nutrition. Animal breeding contributes, together with vegetal production, to the development of our entire agriculture, to the increase of labour productivity and economic efficiency, thus contributing both **directly** (production of foods with high biological value: meat, milk, eggs, etc.) and **indirectly** to the development of the agricultural economy (DECUN AND KRUTSCH, 2001, NEAGU, CULEA AND PETROMAN, 2007).

Animals still play an important role in households supplying part of the mechanical energy necessary to work the land, despite the development and the diversification of the mechanised tools (DECUN AND KRUTSCH, 2001).

The animal breeding sector undergoes a very difficult period because of the high price of cereals and oil plants, because of the low prices farmers get for their produce from the processing industries, because of the high costs of meeting European legislation concerning the environment, the animal welfare and protection, the biosecurity, and other constraints that cannot be traced in the legislation of our main competitors on the world market (DECUN AND KRUTSCH, 2001, O.E.C.D. 2010, Hotărârea de Guvern nr. 739 din 20 aprilie 2010) To note the negative impact of the high prices of the European commercial networks that have resulted in a decrease of the consumption of meat and meat produce.

MATERIAL AND METHOD

Due to the biological value of the meat from domestic breeds, we need to take protection measures for the vulnerable animal species to preserve their valuable genes.

To prepare the scientific paper we used the data published in the List of animal genetic resources in critical condition, endangered and vulnerable, developed by the Ministry of Agriculture.

In this paper, we aim at presenting the most valuable domestic animal breeds and lines and the solutions to adopt to preserve vulnerable animal species now that more and more countries focus on biological agriculture. These animal species with a high degree of adaptability and resistance to disease can be a valuable genetic material for the improvement of some production features of the commercial lines and hybrids whose main production (the meat) no longer has the organoleptic features values by the consumers.

RESULTS AND DISCUSSION

In Romania, there are still valuable genetic resources that need to be preserved through measures taken by the authorities. There are numerous animal species threatened by different levels of vulnerability, among which the following:

- **threatened animal populations** are represented by 101-1,000 females:
 - the *Gât Golaș de Transilvania* chicken (*Gallus gallus domesticus* L.), with 996 pure mother-specimens;
- **critically endangered or extinct animal populations** have less than 100 females:
 - 2 sheep breeds (*Ovis aries* L.): Polwarth (128 females) and Belgian Suffolk Cullard (57 females);
 - 22 chicken breeds (*Gallus gallus domesticus* L.) among which: Anvers Chicken (30 females), New-Jersey (27 females), Dwarf Phoenix (45 females) (*Figure 1*), American Dwarf (15 females), Vonwerk (15 females), Dwarf Welsummer (45 females), Dwarf Yokohama (30 females);
 - the Bazna pig, with 79 reproduction adult boars
 - *Sura de stepă* (185 - heads), the oldest domestic bovine breed: if, until the half of the 19th century, it dominated the grasslands all over Romania, nowadays there are only 51 females at the Bovine Research-Development Station in Dancu (Iași County), at the Grassland Research-Development Station in Jucu (Cluj County), and at a farm in the Ialomița County (*Figure 1*):



Figure 1. The *Sură de stepă* cow

- **vulnerable animal populations** are represented by 1,000-5,000 females:
- buffalo (*Bubalus bubalis* L.) (total in Romania – 433 heads from which 228 females in the Braşov County);
- the White Banat Goat (*Capra aegagrus hircus* L.) (603 females), the Carpatian Goat (3097 females);
- the Karakul sheep (*Ovis aries* L.) (3091 - heads);
- the Australian Merino (113 - heads), the Cluj Merino (114 - heads) (*Figure 2*), the Palas Merino (6138 - heads), the Stavropol Merino (1432 - heads), the Suseni Merino (1011 - heads), and the Transylvanian Merino (2396 - heads) (*Figure 2*) (*Ovis aries* L.):

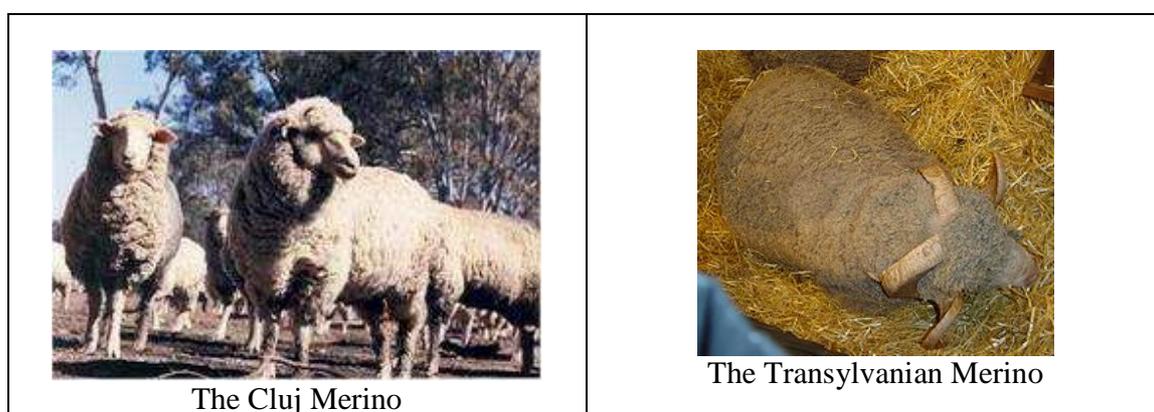


Figure 2. The Transylvanian Merino and the Cluj Merino

- the Raţca sheep (Wallachian with corkscrew-like horns) (*Ovis aries* L.), bred for thousands of years in the Banat area only, is represented nowadays by only 2,371 females (*Figure 3*):



Figure 3. The Raţca sheep

- the Black-headed *Țigaie trane de Teleorman* (*Ovis aries* L.) (3,382 - heads) (Figure 4);



Figure 4. The Black-headed *Țigaie de Teleorman*

- the Rusty Țigaie (1434 - heads) (*Ovis aries* L.);
- fishes: the common carp (*Cyprinus carpio* L.), tench (*Tinca tinca* L., Eurasian spoonbill (*Platalea leucorodia* L.), Beluga sturgeon (*Huso huso* L.), starry sturgeon (*Acipenser stellatus* L.), wels catfish (*Silurus glanis* L.), zander (*Sander lucioperca* L.), Northern pike (*Esox lucius* L.), etc. Fish species is represented by 36,720 heads;
- the Mangalița pig (548 females), whose fat used to be the main ingredient of the Sibiu salami;

CONCLUSIONS

As for the state subsidies to support the National programme concerning the conservation, characterisation, collection, and use of critically endangered, threatened, vulnerable, and unsafe animal genetic resources, we need to mention that the animal species no longer taken into account in nowadays Romania are honeybees, silk worms, fishes, and small fur animals. Moreover, private animal breeders are compelled to register if they wish to be part of the programme. Through the new system, farmers will receive about 200 Euros per bovine, which, in poultry, means about 12 RON per capita. Comparatively, until new measures are taken, the subsidy was 50 RON/capita of poultry and now it is 45 RON/capita of poultry.

We need to take measures to supply state subsidies for the conservation, characterisation, collection, and use of critically endangered, threatened, vulnerable, and unsafe animal genetic resources.

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